



Responding to the Risk of Hurricanes Harvey and Irma: Choices and Adjustment over Time

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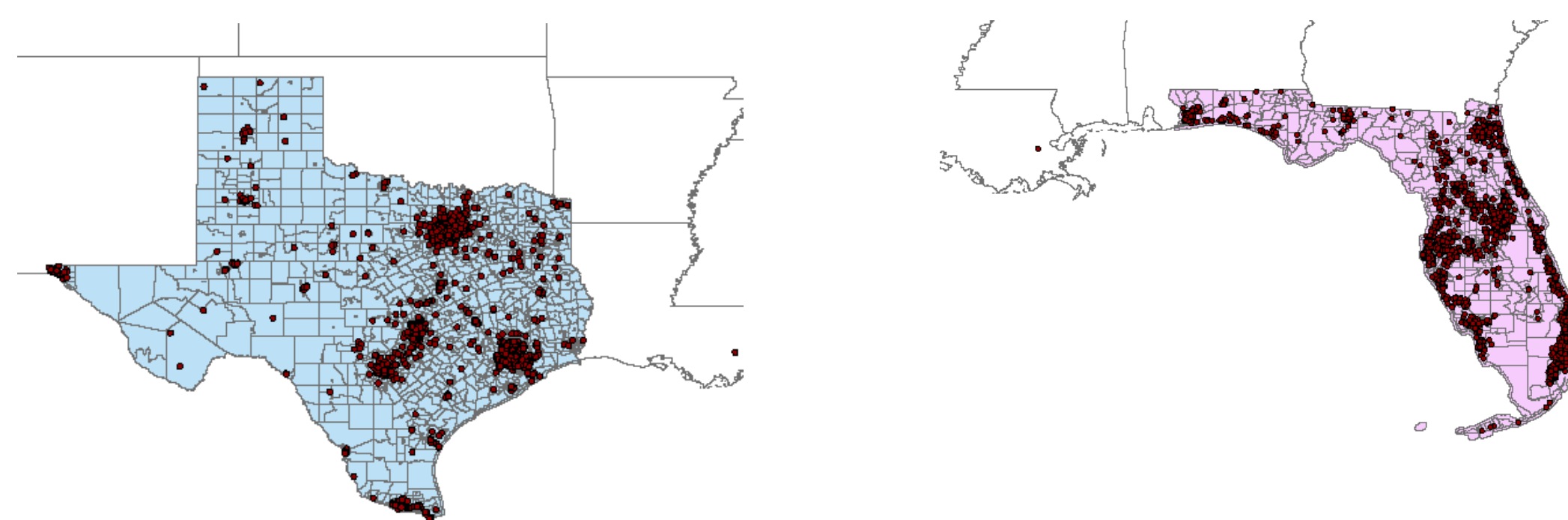
Summary

Community-based traumas are pandemic and recurring, profoundly taxing individual well-being and societal resources. **Hurricane Harvey**, followed by **Hurricane Irma**, represented stunning examples of such traumas. Yet surprisingly few studies have considered how cumulative exposure to collective and individual stressors such as these may contribute to adjustment over time. In addition, the effects of community traumas can span physical as well as temporal boundaries, with widespread media coverage transmitting a trauma's impact far beyond the directly exposed population and challenging the traditional view of trauma exposure.

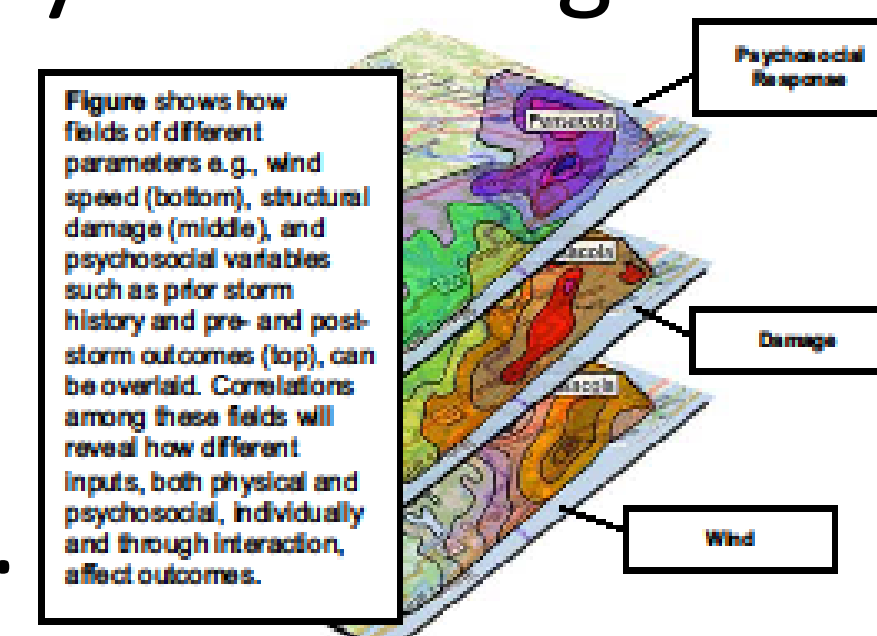
Methods

-- A representative sample of Texas (N=1137) and Florida (N=1637) residents were surveyed between **September 8-11, 2017** -- shortly after Hurricane Harvey made landfall in Texas and in the 72 hours *before* Hurricane Irma made landfall in Florida.

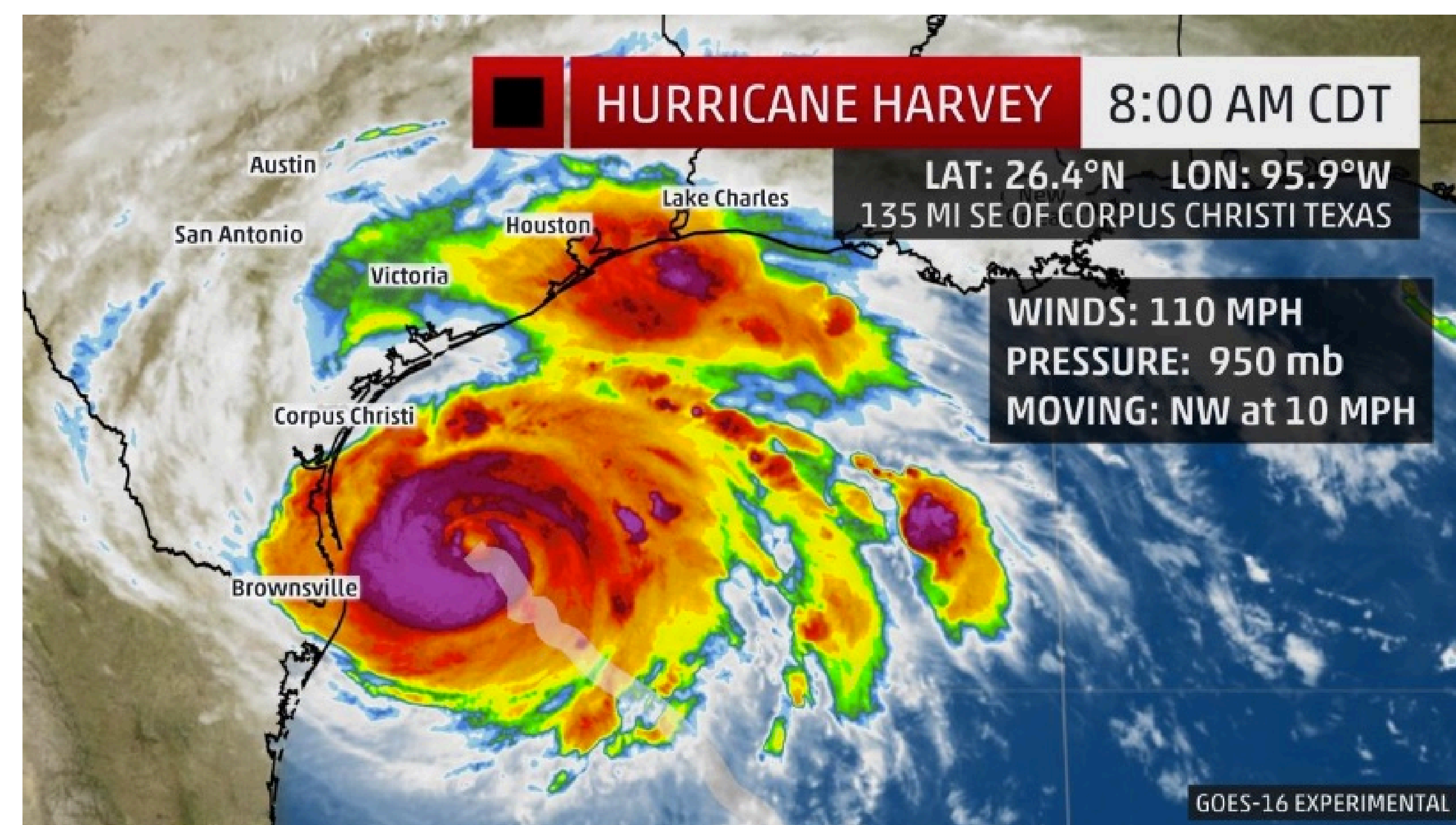
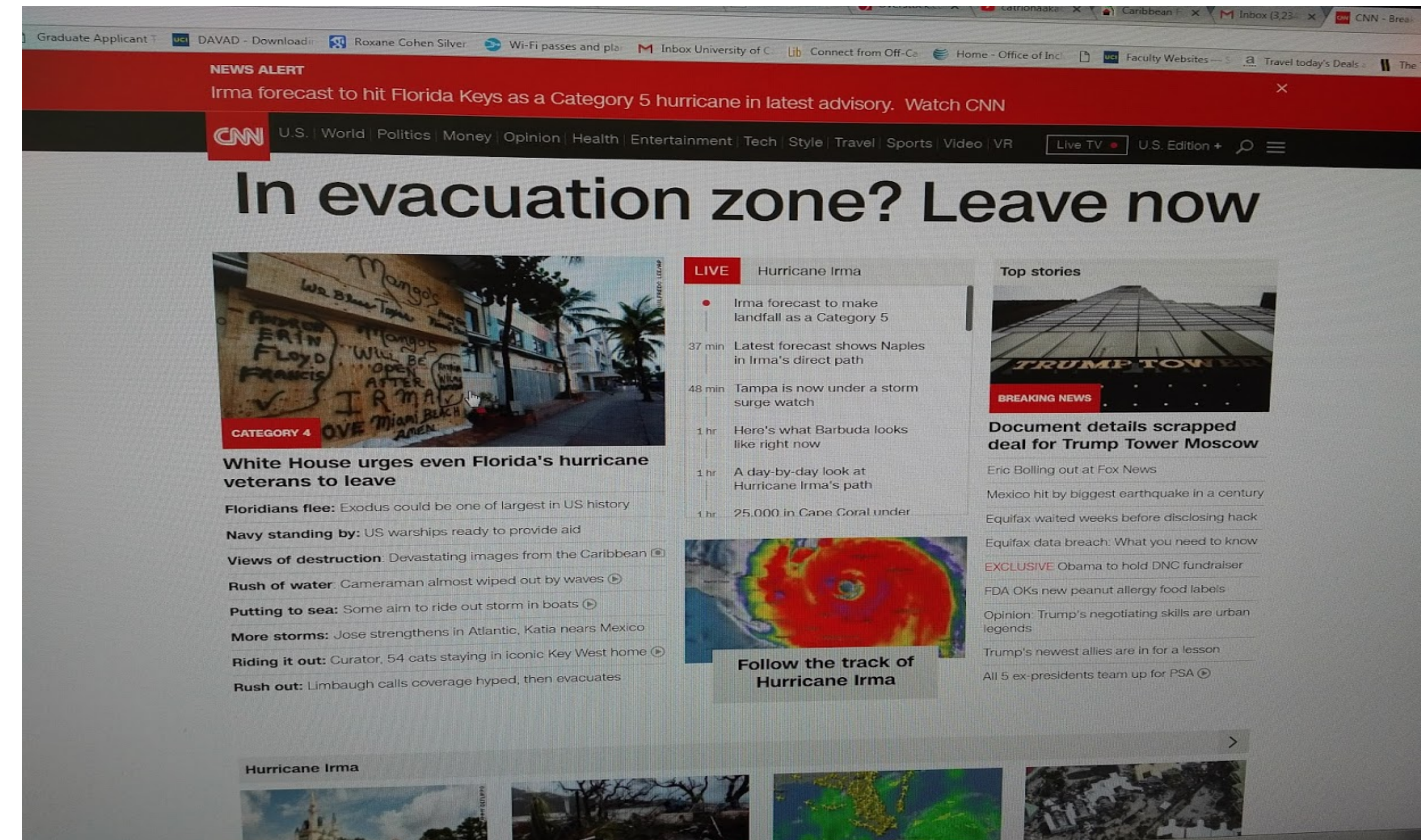
-- A follow-up wave of data collection occurred between **October 12-29, 2017**, within one month after Hurricane Irma made landfall (N=2572).



-- An interdisciplinary team of psychologists, decision scientists, and meteorologists is currently examining the role of physical parameters of the storm (wind, surge, damage) and media communications in predicting psychological and behavioral responses.



The Stressor



Who Evacuated?

FLORIDA (Hurricane Irma)

- 27% of the sample evacuated their homes
- 23% reported living in an evacuation zone but did not evacuate

TEXAS (Hurricane Harvey)

- 10% of the sample evacuated their homes
- 12% reporting living in an evacuation zone but did not evacuate

Most frequent reasons for not evacuating:

- I want to take care of my home (34% TX, 47% FL)
- I have no where to go (29% TX, 24% FL)
- I have pets I cannot take with me (11% TX, 33% FL)

Strongest predictor of evacuation:

- pre-landfall perceptions of risk ($p=.007$)

Who Suffered?

Post-hurricane distress, PTSD & functional impairment:

- more pre-landfall media exposure ($p=.001$)
- lower income ($p<.001$)
- pre-hurricane mental health problems ($p<.001$)
- prior loss in a hurricane ($p=.006$)
- lived in evacuation zone but did not evacuate ($p=.009$)

Discussion

This project presents an unprecedented opportunity to document how people differ in response to Hurricanes Harvey and Irma, to answer questions about who evacuates as a hurricane is approaching (and why), and to further our understanding of the extent to which media coverage of hurricanes plays a role in risk perceptions and acute stress responses to a natural disaster.

Acknowledgements

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